

TOWN OF RICHLANDS

200 WASHINGTON SQUARE

RICHLANDS, VA 24641

PHONE (276) 964-2566 • FAX (276) 963-2889

Received

JAN 31 2012

DEQ-SWRO

January 27, 2012

Commonwealth of Virginia
Dept. of Environmental Quality
SW Regional Office
355 Deadmore Street
PO Box 1688
Abingdon, VA 24212

Re: Biosolids Land Application for Richlands Regional WWTF


Attn: Fred M. Wyatt

Dear Mr. Wyatt:

Due to the costs, rules and regulations, it is virtually impossible for us to go back to land applying. Therefore, we are not going to apply for a new sludge application permit. We are going to continue to use Tazewell County Landfill.

If you should have any questions, please feel free to give me a call anytime at your convenience at 276-964-2569.

Sincerely,



Dave Fields, Richlands Regional WWTF Superintendent

DF/sdw

VPDES PERMIT APPLICATION ADDENDUM

1. Entity to whom the permit is to be issued: RICHLANDS REGIONAL WASTE WATER FACILITY

Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner. TIMOTHY TAYLOR, TOWN MANAGER

2. Is this facility located within city or town boundaries? (Y)/N

3. Provide the tax map parcel number for the land where the discharge is located. _____

4. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? N/A

5. What is the design average effluent flow of this facility? 4.0 MGD

For industrial facilities, provide the max. 30-day average production level, include units:

In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y(N)

If "Yes", please identify the other flow tiers (in MGD) or production levels:

Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

6. Nature of operations generating wastewater:

95 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works: _____

5 % of flow from non-domestic connections/sources

7. Mode of discharge: X Continuous Intermittent Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

8. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:

X Permanent stream, never dry

 Intermittent stream, usually flowing, sometimes dry

 Ephemeral stream, wet-weather flow, often dry

 Effluent-dependent stream, usually or always dry without effluent flow

 Lake or pond at or below the discharge point

 Other: _____

9. Approval Date(s):

O & M Manual DECEMBER 4, 1991 Sludge/Solids Management Plan FEBRUARY 24, 1992

Have there been any changes in your operations or procedures since the above approval dates? Y (N)

Received Received

FEB 24 2012

JAN 31 2012

Form Approved 1/14/99
OMB Number 2040-0086

FACILITY NAME AND PERMIT NUMBER: VA0021199
RICHLANDS REGIONAL WASTEWATER TREATMENT FACILITY

FORM
2A
NPDES

DEO-SWRO
NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

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RICHLANDS REGIONAL WASTEWATER TREATMENT FACILITY

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OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information Packet.

A.1. Facility Information.

Facility Name RICHLANDS REGIONAL WASTEWATER TREATMENT FACILITY

Mailing Address 200 WASHINGTON SQUARE
RICHLANDS, VA 24641

Contact Person TIMOTHY L. TAYLOR

Title TOWN MANAGER

Telephone Number (276) 964-2566

Facility Address 425 PLANT ROAD
(not P.O. Box) RAVEN, VA 24639

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant Name TOWN OF RICHLANDS

Mailing Address 200 WASHINGTON SQUARE
RICHLANDS, VA 24641

Contact Person DAVE FIELDS

Title WWTP SUPERINTENDENT

Telephone Number (276) 964-2569

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner ☐ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☒ facility ☐ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0021199

PSD _____

UIC _____

Other _____

RCRA _____

Other _____

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>RICHLANDS WWTP</u>	<u>6,450</u>	<u>SEPARATE</u>	<u>MUNICIPAL</u>
<u>TOWN OF CEDAR BLUFF</u>	<u>1,225</u>	<u>SEPARATE</u>	<u>MUNICIPAL</u>
<u>TAZEWELL CO. PSA</u>	<u>5,285</u>	<u>SEPARATE</u>	<u>COUNTY</u>
Total population served	<u>12,960</u>		

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A.5. Indian Country.

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ NoA.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 4.0
- mgd

	Two Years Ago	Last Year	This Year
b. Annual average daily flow rate	<u>1,869,683</u>	<u>2,025,616</u>	<u>1,034,000</u>
c. Maximum daily flow rate	<u>7,180,167</u>	<u>5,316,733</u>	<u>4,781,833</u>

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer100 %☐ Combined storm and sanitary sewer0 %

A.8. Discharges and Other Disposal Methods.

- a. Does the treatment works discharge effluent to waters of the U.S.?

☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

- i. Discharges of treated effluent 1
- ii. Discharges of untreated or partially treated effluent NO
- iii. Combined sewer overflow points N/A
- iv. Constructed emergency overflows (prior to the headworks) N/A
- v. Other _____

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharge to surface impoundment(s) _____ mgd

Is discharge ☐ continuous or ☐ intermittent?

- c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ mgd

Is land application ☐ continuous or ☐ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes ☒ No

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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

N/A

If transport is by a party other than the applicant, provide:

Transporter Name _____

Mailing Address _____

Contact Person _____

Title _____

Telephone Number () _____

For each treatment works that receives this discharge, provide the following:

Name _____

Mailing Address _____

Contact Person _____

Title _____

Telephone Number () _____

If known, provide the NPDES permit number of the treatment works that receives this discharge _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8. through A.8.d above (e.g., underground percolation, well injection): ☐ Yes ☐ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed by this method: _____

Is disposal through this method ☐ continuous or ☐ intermittent?

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WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

- a. Outfall number 001
- b. Location TOWN OF RICHLANDS 24641
(City or town, if applicable) (Zip Code)
TAZEWELL COUNTY VA
(County) (State)
37° 05 MIN. 27 SEC. 81° 49 MIN. 56 SEC.
(Latitude) (Longitude)
- c. Distance from shore (if applicable) 0 ft.
- d. Depth below surface (if applicable) 0 ft.
- e. Average daily flow rate 1.2 mgd
- f. Does this outfall have either an intermittent or a periodic discharge? ☐ Yes ☒ No (go to A.9.g.)
If yes, provide the following information:
Number of times per year discharge occurs: _____
Average duration of each discharge: _____
Average flow per discharge: _____ mgd
Months in which discharge occurs: _____
- g. Is outfall equipped with a diffuser? ☐ Yes ☒ No

A.10. Description of Receiving Waters.

- a. Name of receiving water CLINCH RIVER
- b. Name of watershed (if known) UPPER CLINCH RIVER
United States Soil Conservation Service 14-digit watershed code (if known): N/A
- c. Name of State Management/River Basin (if known): TENNESSEE-BIG SANDY RIVER BASIN
United States Geological Survey 8-digit hydrologic cataloging unit code (if known): 06010205
P03 WATERBODY
- d. Critical low flow of receiving stream (if applicable)
acute 11.857 cfs chronic 16.857 cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): 150 mg/l of CaCO₃

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Form Approved 1/14/99
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- a. What levels of treatment are provided? Check all that apply.

☒ Primary☒ Secondary☒ Advanced☐ Other. Describe: _____

- b. Indicate the following removal rates (as applicable):

Design BOD5 removal or Design CBOD5 removal 87.5/92.5 % **SEASONLY**Design SS removal 87.5 %Design P removal NA %Design N removal 70 %

Other _____ %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe:
-
- ULTRAVIOLET DISINFECTION**

If disinfection is by chlorination is dechlorination used for this outfall?

☐ Yes☒ No

- d. Does the treatment plant have post aeration?

☒ Yes☐ No

A.12 Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.0	s.u.			
pH (Maximum)	8.0	s.u.			
Flow Rate	8.14	MGD	1.2	MGD	CONT.
Temperature (Winter)	64°	FAHRENHEIT	50	FAHRENHEIT	182
Temperature (Summer)	76°	FAHRENHEIT	68	FAHRENHEIT	183

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NON CONVENTIONAL COMPOUNDS							
BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD5	15.3	MG/L	3.7	MG/L	78	5210B STD METHOD
	CBOD5						
FECAI COLIFORM E. COLI	126	N/CML	4.5	N/CML	52	18	IDEXX COLILERT
TOTAL SUSPENDED SOLIDS (TSS)	24.6	MG/L	2.1	MG/L	78	2540D	STD METHOD

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
2A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

200,000 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

ON-GOING SITUATION REPAIRING HOLES TO MINIMIZE INFILTRATION

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within $\frac{1}{4}$ mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where the hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

Telephone Number: () _____

Responsibilities of Contractor: _____

B.5. Scheduled improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

N/A

- b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

☐ Yes ☒ No

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c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM/DD/YYYY	Actual Completion MM/DD/YYYY	
- Begin Construction	/ /	/ /	N/A
- End Construction	/ /	/ /	
- Begin Discharge	/ /	/ /	
- Attain Operational Level	/ /	/ /	

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: _____

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide effluent testing for the following listed parameters and those required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum effluent testing data must be based on at least three pollutant scans, preferably represent several seasons, and must be no more than four and on-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NON CONVENTIONAL COMPOUNDS							
AMMONIA (as N)	0.11	MG/L	.04	MG/L	1/WEEK	EPA350.1	
CHLORINE (TOTAL RESIDUAL, TRC)	NO CL2 ON GROUNDS/ULTRAVIOLET USED						
DISSOLVED OXYGEN	10.95	MG/L	8.2	MG/L	365	18TH EDITION 4500 OG	
TOTAL KJELDAHL NITROGEN (TKN)	ANALYSIS BEING CONDUCTED						
NITRATE PLUS NITRITE NITROGEN	ANALYSIS BEING CONDUCTED						
OIL and GREASE	ANALYSIS BEING CONDUCTED						
PHOSPHORUS (Total)	ANALYSIS BEING CONDUCTED						
TOTAL DISSOLVED SOLIDS (TDS)	ANALYSIS BEING CONDUCTED						
OTHER							

END OF PART B.**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

FACILITY NAME AND PERMIT NUMBER:

RICHLANDS REGIONAL WWTF VA 0021199

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BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☒ Part D (Expanded Effluent Testing Data)

☒ Part E (Toxicity Testing: Biomonitoring Data)

☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

☐ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title TIMOTHY L. TAYLOR, TOWN MANAGER

Signature 

Telephone number (276) 964-2566

Date signed 1-27-2012

Upon request of the permitting authority, you must submit any other information necessary to assure wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:

RICHLANDS REGIONAL WWTF VA 0021199

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SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY				< 0.001	MG/L				1/5	EPA200.8	0.00041
ARSENIC				< 0.001	MG/L				1/5	EPA200.8	0.00035
BERYLLIUM				0.001	MG/L				1/5	EPA200.8	0.0010
CADMIUM				< 0.001	MG/L				1/5	EPA200.8	0.00013
CHROMIUM				< 0.001	MG/L				1/5	CALCULATION	ERROR
COPPER				0.00114	MG/L				1/5	EPA200.8	0.00017
LEAD				< 0.001	MG/L				1/5	EPA200.8	0.00015
MERCURY				< 0.002	MG/L				1/5	EPA245.1	0.00018
NICKEL				0.00286	MG/L				1/5	EPA200.8	0.00055
SELENIUM				< 0.001	MG/L				1/5	EPA200.8	0.00055
SILVER				< 0.001	MG/L				1/5	EPA200.8	0.00009
THALLIUM				< 0.001	MG/L				1/5	EPA200.8	0.00007
ZINC				0.0139	MG/L				1/5	EPA200.8	0.00007
CYANIDE				< 0.0013	MG/L				1/5	SM 4500 CN, CE	0.0013
TOTAL PHENOLIC COMPOUNDS				< 0.00493	MGL				1/5	EPA625	0.00493
HARDNESS (AS CaCO3)				250	MG/L				1/5	EPA625	0.00250
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer											

FACILITY NAME AND PERMIT NUMBER:

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POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS											
ACROLEIN					< 0.01	MG/L			1/5	EPA624	0.01
ACRYLONITRILE					< 0.01	MG/L			1/5	EPA624	0.01
BENZENE					< 0.01	MG/L			1/5	EPA624	0.001
BROMOFORM					< 0.001	MG/L			1/5	EPA624	0.001
CARBON TETRACHLORIDE					< 0.001	MG/L			1/5	EPA624	0.001
COLORBENZENE					< 0.001	MG/L			1/5	EPA624	0.001
CHLOROBIDBROMO-METHANE					< 0.001	MG / L			1/5	EPA624	0.001
CHLOROETHANE					< 0.001	MG/L			1/5	EPA624	0.001
2-CHLORO-ETHYLVINYL ETHER					< 0.01	MG/L			1/5	EPA624	0.001
CHOLOROFORM					< 0.001	MG/L			1/5	EPA624	0.001
DICHLOROBROMO-METHANE					< 0.001	MG/L			1/5	EPA624	0.001
1,1-DICHLOROETHANE					< 0.001	MG/L			1/5	EPA624	0.001
TRANS-1,2-DICHLORO-ETHYLENE					< 0.001	MG/L			1/5	EPA624	0.001
1,1-DICHLOROPROPANE					< 0.001	MG / L			1/5	EPA624	0.001
ETHYLBENZENE					< 0.001	MG/L			1/5	EPA624	0.001
METHYL BROMIDE					< 0.001	MG / L			1/5	EPA624	0.001
METHYL CHLORIDE					< 0.001	MG/L			1/5	EPA624	0.001
METHYLENE CHLORIDE					< 0.001	MG/L			1/5	EPA624	0.001
1,1,2,2-TETRACHLORO-ETHANE					< 0.001	MG/L			1/5	EPA624	0.001
TETRACHLORO-ETHYLENE					< 0.001	MG/L			1/5	EPA624	0.001
TOLUENE					< 0.001	MG/L			1/5	EPA624	0.001

FACILITY NAME AND PERMIT NUMBER:

RICHLANDS REGIONAL WWTF VA0021199

Form Approved 1/14/99
OMB Number 2040-0086Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE					< 0.001	MG/L			1/5	EPA624	0.001
1,1,2-TRICHLOROETHANE					< 0.001	MG/L			1/5	EPA624	0.001
TRICHLOROETHYL ENE					< 0.001	MG/L			1/5	EPA624	0.001
VINYL CHLORIDE					< 0.001	MG/L			1/5	EPA624	0.001

Use this space (or a separate sheet) to provide information on other metals requested by the permit writer

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ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL					< 0.00465	MG/L			1/5	EPA625	0.00465
2-CHLOROPHENOL					< 0.00539	MG/L			1/5	EPA625	0.00539
2,4-DIMETHYLPHENOL					< 0.00417	MG/L			1/5	EPA625	0.00417
4,6-DINITRO-O-CRESOL					< 0.00386	MG/L			1/5	EPA625	0.00386
2,4-DINITROPHENOL					< 0.00299	MG/L			1/5	EPA625	0.00299
2-NITROPHENOL					< 0.0046	MG/L			1/5	EPA625	0.0046
4-NITROPHENOL					< 0.00294	MG/L			1/5	EPA625	0.00294
PENTA CHLOROPHENOL					< 0.00246	MG/L			1/5	EPA625	0.00246
PHENOL					< 0.00493	MG/L			1/5	EPA625	0.00493
2,4,6-TRICHLORO PHENOL					< 0.00406	MG/L			1/5	EPA625	0.00406

Use this space (or a separate sheet) to provide information on other metals requested by the permit writer

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BASE-NEUTRAL COMPOUNDS

ACENAPHTHENE					< 0.00384	MG/L			1/5	EPA625	0.00384
ACENAPHTYLENE					< 0.00419	MG/L			1/5	EPA625	0.00419
ANTHRACENE					< 0.0024	MG/L			1/5	EPA625	0.0024
BENZIDINE					< 0.0105	MG/L			1/5	EPA625	0.0105
BENZO(A) ANTHRACENE					< 0.00203	MG/L			1/5	EPA625	0.00203
BENZO(A)PYRENE					< 0.00171	MG/L			1/5	EPA625	0.00171

FACILITY NAME AND PERMIT NUMBER:

RICHLANDS REGIONAL WWTF VA0021199

Form Approved 1/14/99
OMB Number 2040-0086Outfall number: **001** (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE				< 0.00134	MG/L				1/5	EPA625	0.00134
BENZO(GH)PERYLENE				< 0.00164	MG/L				1/5	EPA625	0.00164
BENZO(K)FLUORANTHENE				< 0.00198	MG/L				1/5	EPA625	0.00198
BIS (2-CHLOROETHOXY) METHANE				< 0.005	MG/L				1/5	EPA625	0.005
BIS (2-CHLOROETHYL)-ETHER				< 0.00528	MG/L				1/5	EPA625	0.00528
BIS (2-CHLOROISOPROPYL) ETHER				< 0.00529	MG/L				1/5	EPA625	0.00529
BIS (2-ETHYLHEXYL) PHTHALATE				< 0.00249	MG/L				1/5	EPA625	0.00249
4-BROMOPHENYL PHENYL ETHER				< 0.00337	MG/L				1/5	EPA625	0.00337
BUTYL BENZYL PHTHALATE				< 0.0028	MG/L				1/5	EPA625	0.0028
2-CHLORO NAPHTHALENE				< 0.00394	MG/L				1/5	EPA625	0.00394
4-CHLOROPHENYL PHENYL ETHER				< 0.00396	MG/L				1/5	EPA625	0.00396
CHRYSENE				< 0.00194	MG/L				1/5	EPA625	0.00194
DI-N-BUTYL PHTHALATE				< 0.00236	MG/L				1/5	EPA625	0.00236
DI-N-OCTYL PHTHALATE				< 0.00197	MG/L				1/5	EPA625	0.00197
DIBENZO(A,H) ANTHRACENE				< 0.00151	MG/L				1/5	EPA625	0.00151
1,2-DICHLORO BENZENE				< 0.001	MG/L				1/5	EPA624	0.001
1,3-DICHLORO BENZENE				< 0.001	MG/L				1/5	EPA624	0.001
1,4-DICHLORO BENZENE				< 0.001	MG/L				1/5	EPA624	0.001
3,3-DICHLORO BENZIDINE				< 0.00116	MG/L				1/5	EPA625	0.00116
DIETHYL PHTHALATE				< 0.00298	MG/L				1/5	EPA625	0.00298
DIMETHYL PHTHALATE				< 0.00405	MG/L				1/5	EPA625	0.00405
2,4-DINITROTOLUENE				< 0.00332	MG/L				1/5	EPA625	0.00332
2,6-DINITROTOLUENE				< 0.00362	MG/L				1/5	EPA625	0.00362
1,2-DIPHENYLHYDRAZINE				< 0.00404	MG/L				1/5	EPA625	0.00386

FACILITY NAME AND PERMIT NUMBER:

RICHLANDS REGIONAL WWTF VA0021199

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE				< 0.00202	MG/L				1/5	EPA625	0.00202
FLUORENE				< 0.00374	MG/L				1/5	EPA625	0.00374
HEXACHLORO BENZENE				< 0.00276	MG/L				1/5	EPA625	0.00276
HEXACHLOROBUT ADIENE				< 0.00408	MG/L				1/5	EPA625	0.00408
HEXACHLOROCYCLO-PENTADIENE				< 0.00343	MG/L				1/5	EPA625	0.00343
HEXA CHLOROETHANE				< 0.00465	MG/L				1/5	EPA625	0.00465
INDENO(1,2,3-CD) PYRENE				< 0.00149	MG/L				1/5	EPA625	0.00149
ISOPHORONE				< 0.0048	MG/L				1/5	EPA625	0.0048
NAPHTHALENE				< 0.00458	MG/L				1/5	EPA625	0.00458
NITROBENZENE				< 0.00428	MG/L				1/5	EPA625	0.00428
N-NITROSODI-N-PROPYLAMINE				< 0.00515	MG/L				1/5	EPA625	0.00515
N-NITROSODI-METHYLAMINE				< 0.00394	MG/L				1/5	EPA625	0.00394
N-NITROSODI-PHENYLAMINE				< 0.0035	MG/L				1/5	EPA625	0.0035
PHENANTHRENE				< 0.00241	MG/L				1/5	EPA625	0.00242
PYRENE				< 0.00211	MG/L				1/5	EPA625	0.00211
1,2,4-TRICHLOROBENZENE				< 0.00445	MG/L				1/5	EPA625	0.00445

Use this space (or a separate sheet) to provide information on other metals requested by the permit writer

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Use this space (or a separate sheet) to provide information on other metals requested by the permit writer

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END OF PART D.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

RICHLANDS REGIONAL WWTF VA0021199

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SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

☒ chronic ☐ acute SEE PAGE 18 OF 23

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: _____ Test number: _____ Test number: _____

a. Test information.

Test Species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			

b. Give toxicity test methods followed.

Manual title			
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite			
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each.)

Before disinfection			
After disinfection			
After dechlorination			

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Test number: _____		Test number: _____		Test number: _____	
e. Describe the point in the treatment process at which the sample was collected.					
Sample was collected:					
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both					
Chronic toxicity					
Acute toxicity					
g. Provide the type of test performed.					
Static					
Static-renewal					
Flow-through					
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.					
Laboratory water					
Receiving water					
i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.					
Fresh water					
Salt water					
j. Give the percentage effluent used for all concentrations in the test series.					
k. Parameters measured during the test. (State whether parameter meets test method specifications)					
pH					
Salinity					
Temperature					
Ammonia					
Dissolved oxygen					
l. Test Results.					
Acute:					
Percent survival in 100% effluent	%		%		%
LC ₅₀					
95% C.I.	%		%		%
Control percent survival	%		%		%
Other (describe)					

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Chronic:

NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?	/ /	/ /	/ /
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?☐ Yes ☒ NoIf yes, describe: _____

_____**E.4. Summary of Submitted Biomonitoring Test Information.** If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.Date submitted: 10 / / 2008 (MM/DD/YYYY)
2011

Summary of results: (see instructions)

ANNUAL 10/2008 NOTOXICITY, ANNUAL 10/2009 NO TOXICITY, ANNUAL 10/2009 NO TOXICITY,
ANNUAL 10/2011 NO TOXICITY (OUTFALL #001)**END OF PART E.****REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.**

FACILITY NAME AND PERMIT NUMBER:

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SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete part F.

GENERAL INFORMATION:

F.1. Pretreatment program. Does the treatment works have, or is subject to, an approved pretreatment program?

☐ Yes ☒ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 0

b. Number of CIUs. 0

SIGNIFICANT INDUSTRIAL USER INFORMATION::

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: N/A

Mailing Address: _____

F.4. Industrial Processes. Describe all the industrial processes that affect or contribute to the SIU's discharge.

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): _____

Raw material(s): _____

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharge into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____ continuous or _____ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____ continuous or _____ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ☐ Yes ☐ No

b. Categorical pretreatment standards ☐ Yes ☐ No

If subject to categorical pretreatment standards, which category and subcategory?

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F.8. Problems at the Treatment Works Attributed to Waste Discharge by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

☐ Yes ☒ No

If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail or dedicated pipe?

☐ Yes ☐ No (go to F.12)

F.10 Waste transport. Method by which RCRA waste is received (check all that apply):

☐ Truck ☐ Rail ☐ Dedicated Pipe

F.11 Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number

Amount

Units

<u>EPA Hazardous Waste Number</u>	<u>Amount</u>	<u>Units</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12 Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.) ☒ No

F.13 Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is excepted to originate in the next five years).

F.14 Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary.)

F.15 Waste Treatment.

a. Is this waste treated (or will be treated) prior to entering the treatment works?

☐ Yes ☒ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous

☐ Intermittent

If intermittent, describe discharge schedule.

END OF PART F.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

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SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points. N/A
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1 or on a separate drawing, of the combined sewer collection system that includes the following information.

- Location of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3 Description of Outfall.

- Outfall number N/A
- Location
(city or town, if applicable) _____ (Zip Code) _____
(County) _____ (State) _____
(Latitude) _____ (Longitude) _____
- Distance from shore (if applicable) _____ ft.
- Depth below surface (if applicable) _____ ft.
- Which of the following were monitored during the last year for this CSO?
☐ Rainfall ☐ CSO pollutant concentrations ☐ CSO frequency
☐ CSO flow volume ☐ Receiving water quality
- How many storm events were monitored during the last year? _____

G.4. CSO Events.

- Give the number of CSO events in the last year.
_____ events (☐ actual or ☐ approx.)
- Give the average duration per CSO event.
_____ hours (☐ actual or ☐ approx.)

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- c. Give the average volume per CSO event.
_____ million gallons (☐ actual or ☐ approx.)
- d. Give the minimum rainfall that caused a CSO event in the last year
_____ Inches of rainfall

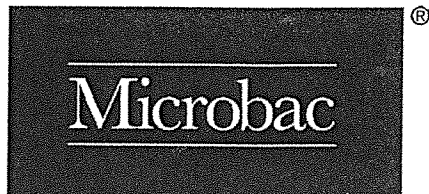
G.5. Description of Receiving Waters.

- a. Name of receiving water: _____
- b. Name of watershed/river/stream system: _____
United State Soil Conservation Service 14-digit watershed code (if known): _____
- c. Name of State Management/River Basin: _____
United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

**END OF PART G.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
2A YOU MUST COMPLETE.**



Microbac Laboratories, Inc.

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CERTIFICATE OF ANALYSIS

Dave Fields
Richlands, Town of
200 Washington Square
Richlands, VA 27641

Date Reported: 2/24/2012
Date Received: 2/16/2012
Cust #: .V161
PO#:

Workorder: 1202762 Project: Wastewater Samples

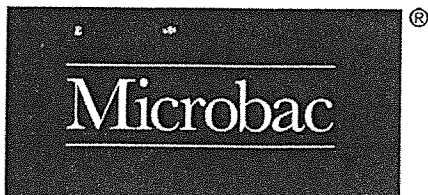
Certifications

Code	Description	Number	Expires
EPA	Environmental Protection Agency	TN00018	
ETC	Environmental Testing & Consulting	TN02027	
IN_DW	Indiana State Department of Health	C-TN-03	
TN_DW	State of Tennessee	TN02017	04/30/2014
USDA	US Department of Agriculture		11/30/2012

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced wholly or in part for advertising or other purposes without approval from the laboratory.
USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research

MEMBER





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DEQ-SWRO

CERTIFICATE OF ANALYSIS

Dave Fields
Richlands, Town of
200 Washington Square
Richlands, VA 27641

Date Reported: 2/24/2012
Date Received: 2/16/2012
Cust #: V161
PO#:

Workorder: 1202762 Project: Wastewater Samples

Analyte	Result	Units	Qualifier	MDL	Analyst	Analyzed	Method
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Wastewater Samples Sampled: 02/15/2012 16:30

1202762-01 (Wastewater)

Oil and Grease	<1.46	mg/L		1.46	TMM	02/20/2012 08:00	E1664
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Wastewater Samples Sampled: 02/15/2012 16:35

1202762-02 (Wastewater)

Nitrogen, Total Kjeldahl	0.730	mg/L		0.100	DIH	02/23/2012 13:32	E351.2
--------------------------	-------	------	--	-------	-----	------------------	--------

Common anions

Nitrate	5.94	mg/L		0.100	JBK	02/18/2012 03:06	E300
---------	------	------	--	-------	-----	------------------	------

Nitrite	<0.100	mg/L		0.100	JBK	02/18/2012 03:06	E300
---------	--------	------	--	-------	-----	------------------	------

Phosphorus

Phosphorus, Total	<0.100	mg/L		0.100	JBK	02/23/2012 15:15	E365.4
-------------------	--------	------	--	-------	-----	------------------	--------

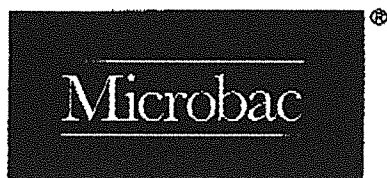
TOTAL DISSOLVED SOLIDS

Total Dissolved Solids	250	mg/L		10.0	TMM	02/21/2012 15:02	A2540C
------------------------	-----	------	--	------	-----	------------------	--------

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CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · CONSUMER PRODUCTS · WATER · AIR · WASTES · FOOD · PHARMACEUTICALS · NUTRACEUTICALS

CERTIFICATE OF ANALYSIS

Dave Fields
Richlands, Town of
200 Washington Square
Richlands, VA 27641

Date Reported: 3/8/2012
Date Received: 2/28/2012
Cust #: V161
PO#:

Workorder: 1203475 Project: Wastewater Samples

Analyte	Result	Units	Qualifier	MDL	Analyst	Analyzed	Method
---------	--------	-------	-----------	-----	---------	----------	--------

Wastewater Samples - Grab Sampled: 02/27/2012 16:30

1203475-01 (Wastewater)

Analyte	Result	Units	Qualifier	MDL	Analyst	Analyzed	Method
Oil and Grease	<1.40	mg/L		1.40	TMM	03/02/2012 08:10	E1664

Wastewater Samples - Composite Sampled: 02/27/2012 16:45

1203475-02 (Wastewater)

Nitrogen, Total Kjeldahl	2.65	mg/L		0.100	DIH	03/07/2012 12:12	E351.2
--------------------------	------	------	--	-------	-----	------------------	--------

Common anions

Nitrate	2.91	mg/L		1.00	JBK	02/29/2012 15:44	E300
---------	------	------	--	------	-----	------------------	------

Nitrite	<1.00	mg/L		1.00	JBK	02/29/2012 15:44	E300
---------	-------	------	--	------	-----	------------------	------

Phosphorus

Phosphorus, Total	0.135	mg/L		0.100	DIH	03/07/2012 10:03	E365.4
-------------------	-------	------	--	-------	-----	------------------	--------

TOTAL DISSOLVED SOLIDS

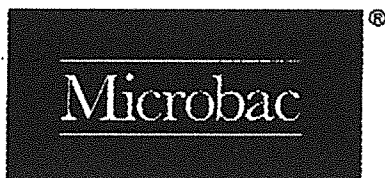
Total Dissolved Solids	568	mg/L		10.0	HJR	03/01/2012 10:27	A2540C
------------------------	-----	------	--	------	-----	------------------	--------

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USDA-EPA-NID&H Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research

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CERTIFICATE OF ANALYSIS

Dave Fields
Richlands, Town of
200 Washington Square
Richlands, VA 27641

Date Reported: 3/23/2012
Date Received: 3/15/2012
Cust #: V161
PO#:

Workorder: 1204530 Project: Wastewater Samples

Analyte	Result	Units	Qualifier	MDL	Analyst	Analyzed	Method
---------	--------	-------	-----------	-----	---------	----------	--------

Wastewater Samples - Grab Sampled: 03/15/2012 07:30

1204530-01 (Wastewater)

Oil and Grease	<1.40	mg/L		1.40	TMM	03/20/2012 08:40	E1664
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Wastewater Samples - Composite Sampled: 03/15/2012 07:25

1204530-02 (Wastewater)

Nitrogen, Total Kjeldahl	2.86	mg/L		0.100	JBK	03/22/2012 09:51	E351.2
--------------------------	------	------	--	-------	-----	------------------	--------

Common anions

Nitrate	3.20	mg/L		0.100	JBK	03/16/2012 22:24	E300
---------	------	------	--	-------	-----	------------------	------

Nitrite	<0.1	mg/L		0.100	JBK	03/16/2012 22:24	E300
---------	------	------	--	-------	-----	------------------	------

Phosphorus

Phosphorus, Total	<0.1	mg/L		0.100	JBK	03/22/2012 08:39	E365.4
-------------------	------	------	--	-------	-----	------------------	--------

TOTAL DISSOLVED SOLIDS

Total Dissolved Solids	216	mg/L		10.0	HJR	03/16/2012 13:07	A2540C
------------------------	-----	------	--	------	-----	------------------	--------

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9/30/2011

Town of Richlands W.W. T.F.
200 Washington Square
Richlands, VA 24201

SUMMARY
Town of Richlands W.W.T.F
Annual Chronic Toxicity Testing
Sample Dates: August 21-26, 2011
Test Dates: August 23-30, 2011
Permit #: VA0021199

STATE PERMIT LIMITS

PIMEPHALES PROMELAS
SURVIVAL

*NOEC: 19% effluent
*T U c: 5.26

GROWTH

*NOEC: 19% effluent
*T U c: 5.26

CERIODAPHNIA DUBIA
SURVIVAL

*NOEC: 19% effluent
*T U c: 5.26

REPRODUCTION

*NOEC: 19% effluent
*T U c: 5.26

*NOEC: No Observed Effect Concentration
*T U c (Chronic Toxic Units) = 100 / NOEC
*IC25: Concentration where a 25% reduction occurs
*LC50: Concentration that is lethal to 50% of the organisms exposed

RESULTS

PIMEPHALES PROMELAS
SURVIVAL

*IC25: Greater than 100% effluent
*NOEC: 100% effluent
*T U c: 1.00
*48 hr LC50: Greater than 100% effluent

GROWTH

*IC25: Greater than 100% effluent
*NOEC: 100% effluent
*T U c: 1

CERIODAPHNIA DUBIA
SURVIVAL

*IC25: Greater than 100% effluent
*NOEC: 100% effluent
*T U c: 1.00
*48 hr LC50: Greater than 100% effluent

REPRODUCTION

*IC25: Greater than 100% effluent
*NOEC: 100% effluent
*T U c: 1.00

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9/30/2010

Town of Richlands W.W. T.F.
200 Washington Square
Richlands, VA 24201

S U M M A R Y
Town of Richlands W.W.T.F
Annual Chronic Toxicity Testing
Sample Dates: August 15-20, 2010
Test Dates: August 17-25, 2010
Permit #: VA0021199

STATE PERMIT LIMITS

PIMEPHALES PROMELAS

SURVIVAL

*NOEC: 19% effluent
*T U c: 5.26

GROWTH

*NOEC: 19% effluent
*T U c: 5.26

CERIODAPHNIA DUBIA

SURVIVAL

*NOEC: 19% effluent
*T U c: 5.26

REPRODUCTION

*NOEC: 19% effluent
*T U c: 5.26

*NOEC: No Observed Effect Concentration
*T U c (Chronic Toxic Units) = 100 / NOEC
*IC25: Concentration where a 25% reduction occurs
*LC50: Concentration that is lethal to 50% of the organisms exposed

RESULTS

PIMEPHALES PROMELAS

SURVIVAL

*IC25: Greater than 100% effluent
*NOEC: 100% effluent
*T U c: 1.00
*48 hr LC50: Greater than 100% effluent

GROWTH

*IC25: Greater than 100% effluent
*NOEC: 100% effluent
*T U c: 1

CERIODAPHNIA DUBIA

SURVIVAL

*IC25: Greater than 100% effluent
*NOEC: 100% effluent
*T U c: 1.00
*48 hr LC50: Greater than 100% effluent

REPRODUCTION

*IC25: Greater than 100% effluent
*NOEC: 100% effluent
*T U c: 1.00



GPL LABORATORIES TN, L.L.C.

71 WILSON AVENUE
JOHNSON CITY, TENNESSEE 37604
(423) 926-6385 FAX: (423) 926-6997

October 23, 2009

Town of Richlands W.W.T.F.
200 Washington Square
Richlands, VA 24201

SUMMARY

Town of Richlands W.W.T.F.
Annual Chronic Toxicity Testing
Sample Dates: September 14-18, 2009
Test Dates: September 15-22, 2009

STATE PERMIT LIMITS

PIMEPHALES PROMELAS SURVIVAL AND GROWTH

*NOEC: 19% effluent

*TU c: 5.26

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

*NOEC: 19% effluent

*TU c: 5.26

*NOEC: No Observed Effect Concentration

*TU c (Chronic Toxic Units) = $100 / \text{NOEC}$

*IC25: Concentration where a 25% reduction occurs.

*LC50: Concentration that is lethal to 50% of the organisms exposed.

RESULTS

PIMEPHALES PROMELAS SURVIVAL AND GROWTH

*NOEC: 100% effluent

*TU c: 1.0

*IC25: Greater than 100% effluent

*48 hr. LC50: Greater than 100% effluent

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

*NOEC: 100% effluent for survival

*TU c: 1.0

*IC25: Greater than 100% effluent

*48 hr. LC50: Greater than 100% effluent



GPL LABORATORIES TN, L.L.C.

71 WILSON AVENUE
JOHNSON CITY, TENNESSEE 37604
(423) 926-6385 FAX: (423) 926-6997

October 06, 2008

Town of Richlands W.W.T.F.
200 Washington Square
Richlands, VA 24201

SUMMARY
Town of Richlands W.W.T.F.
Annual Chronic Toxicity Testing
Sample Dates: September 14-19, 2008
Test Dates: September 16-24, 2008

STATE PERMIT LIMITS

PIMEPHALES PROMELAS SURVIVAL AND GROWTH

*NOEC: 19% effluent

*TU c: 5.26

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

*NOEC: 19% effluent

*TU c: 5.26

*NOEC: No Observed Effect Concentration

*TU c (Chronic Toxic Units) = 100 / NOEC

*IC25: Concentration where a 25% reduction occurs.

*LC50: Concentration that is lethal to 50% of the organisms exposed.

RESULTS

PIMEPHALES PROMELAS SURVIVAL AND GROWTH

*NOEC: 100% effluent

*TU c: 1.0

*IC25: Greater than 100% effluent

*48 hr. LC50: Greater than 100% effluent

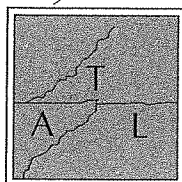
CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

*NOEC: 100% effluent for survival
19% effluent for reproduction

*TU c: 1.0 for survival
5.26 for reproduction

*IC25: Greater than 100% effluent

*48 hr. LC50: Greater than 100% effluent



Tri-State Analytical Laboratory, LLC

P.O. BOX 2024
JOHNSON CITY, TENNESSEE 37605
(423) 926-6385 FAX: (423) 926-6997

October 03, 2007

Town of Richlands W.W.T.F.
200 Washington Square
Richlands, VA 24201

SUMMARY

Town of Richlands W.W.T.F.
Annual Chronic Toxicity Testing
Sample Dates: September 9 - 14, 2007
Test Dates: September 11 - 19, 2007

STATE PERMIT LIMITS

PIMEPHALES PROMELAS SURVIVAL AND GROWTH

*NOEC: 19% effluent

*TU c: 5.26

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

*NOEC: 19% effluent

*TU c: 5.26

*NOEC: No Observed Effect Concentration

*TU c (Chronic Toxic Units) = 100 / NOEC

*IC25: Concentration where a 25% reduction occurs.

*LC50: Concentration that is lethal to 50% of the organisms exposed.

RESULTS

PIMEPHALES PROMELAS SURVIVAL AND GROWTH

*NOEC: 100% effluent

*TU c: 1.0

*IC25: Greater than 100% effluent

*48 hr. LC50: Greater than 100% effluent

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

*NOEC: 100% effluent

*TU c: 1.0

*IC25: Greater than 100% effluent

*48 hr. LC50: Greater than 100% effluent

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Will this facility generate sewage sludge? ☒ Yes ☐ No

Will this facility derive a material from sewage sludge? ☐ Yes ☒ No

If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).

3. Will this facility apply sewage sludge to the land? ☐ Yes ☒ No

Will sewage sludge from this facility be applied to the land? ☐ Yes ☒ No

If you answered No to both questions above, skip Section C.

If you answered Yes to either, answer the following three questions:

a. Will the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions?
☐ Yes ☐ No

b. Will sewage sludge from this facility be placed in a bag or other container for sale or give-away for application to the land? ☐ Yes ☐ No

c. Will sewage sludge from this facility be sent to another facility for treatment or blending? ☐ Yes ☐ No

If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

If you answered Yes to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? ☐ Yes ☐ No

If Yes, complete Section D (Surface Disposal).

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All applicants must complete this section.

1. Facility Information.

- a. Facility name: **RICHLANDS REGIONAL WASTEWATER TREATMENT FACILITY**
- b. Contact person: **TIMOTHY TAYLOR/DAVE FIELDS**
Title: **TOWN MANAGER/CHIEF OPERATOR**
Phone: (276) **964-2566**
- c. Mailing address: **200 WASHINGTON SQUARE**
Street or P.O. Box: **SAME**
City or Town: RICHLANDS State: VA Zip: **24641**
- d. Facility location:
Street or Route **#425 PLANT ROAD**
County: **TAZEWELL COUNTY**
City or Town: RAVEN State: VA Zip: **24639**
- e. Is this facility a Class I sludge management facility? ☐ Yes ☒ No
- f. Facility design flow rate: 4.0 mgd
- g. Total population served: **12,960**
- h. Indicate the type of facility: **ACTIVATED SLUDGE**
☐ Publicly owned treatment works (POTW)
☐ Privately owned treatment works
☐ Federally owned treatment works
☐ Blending or treatment operation
☐ Surface disposal site
☐ Other (describe):

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2. Applicant Information. If the applicant is different from the above, provide the following:

- a. Applicant name:
- b. Mailing address:
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- c. Contact person:
Title:
Phone: ()
- d. Is the applicant the owner or operator (or both) of this facility?
☐ owner ☐ operator
- e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)
☐ facility ☐ applicant

3. Permit Information.

- a. Facility's VPDES permit number (if applicable): **VA0021199**
- b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

<u>Permit Number:</u>	<u>Type of Permit:</u>
VA0021199	WASTEWATER TREATMENT FACILITY

4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? ☐ Yes ☒ No If yes, describe:

5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:
- Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
 - Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.

6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.

7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? Yes XNo
If yes, provide the following for each contractor (attach additional pages if necessary).

Name:

Mailing address:

Street or P.O. Box:

City or Town: _____ State: _____ Zip: _____

Phone: () _____

Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:

If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).

8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic	39.4	10/17/11	SW8466010B	1.00
Cadmium	< 1.00	10/17/11	SW8466010B	1.00
Chromium	20.8	10/17/11	SW8466010B	1.00
Copper	127	10/17/11	SW846601B	1.00
Lead	35.3	10/17/11	SW846601B	1.00
Mercury	0.670	10/17/11	SW8467471A	0.000200
Molybdenum	< 1.00	10/17/11	SW846601B	1.0
Nickel	24.3	10/17/11	SW846601B	1.0
Selenium	11.8	10/17/11	SW846601B	2.00
Zinc	541	10/17/11	SW846601B	2.00

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:

X Section A (General Information)X Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)

____ Section C (Land Application of Bulk Sewage Sludge)

____ Section D (Surface Disposal)

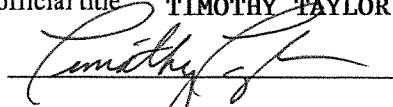
FACILITY NAME: RICHLANDS REGIONAL WWTF

VA 0021199
VPDES PERMIT NUMBER:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title TIMOTHY TAYLOR, TOWN MANAGER

Signature



Date Signed

Telephone number 276-964-2566

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

FACILITY NAME: RICHLANDS REGIONAL WWTF

VPDES PERMIT NUMBER:

**SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE**

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.
Total dry metric tons per 365-day period generated at your facility: 254 dry metric tons

2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
 - a. Facility name:
 - b. Contact Person: N/A
Title:
Phone ()
 - c. Mailing address:
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
 - d. Facility Address:
(not P.O. Box)
 - e. Total dry metric tons per 365-day period received from this facility: _____ dry metric tons
 - f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:

3. Treatment Provided at Your Facility.
 - a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
 Class A x Class B Neither or unknown
 - b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: ANEROBIC DIGESTION/99 @20 DAYS MINIMUM
 - c. Which vector attraction reduction option is met for the sewage sludge at your facility?
 x Option 1 (Minimum 38 percent reduction in volatile solids)
 Option 2 (Anaerobic process, with bench-scale demonstration)
 Option 3 (Aerobic process, with bench-scale demonstration)
 Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
 Option 5 (Aerobic processes plus raised temperature)
 Option 6 (Raise pH to 12 and retain at 11.5)
 Option 7 (75 percent solids with no unstabilized solids)
 Option 8 (90 percent solids with unstabilized solids)
 None or unknown
 - d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: N/A
 - e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: N/A

4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge). N/A
(If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)
 - a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:
_____ dry metric tons
 - b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?
 Yes No

5. Sale or Give-Away in a Bag or Other Container for Application to the Land.

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

- a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: _____ dry metric tons
- b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. Shipment Off Site for Treatment or Blending.

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

- a. Receiving facility name:
- b. Facility contact:
Title: N/A
Phone: ()
- c. Mailing address:
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: _____ dry metric tons
- e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:

<u>Permit Number:</u>	<u>Type of Permit:</u>
_____	_____
_____	_____
- f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? Yes No
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?
 Class A Class B Neither or unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:
- g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? Yes No
Which vector attraction reduction option is met for the sewage sludge at the receiving facility?
 Option 1 (Minimum 38 percent reduction in volatile solids)
 Option 2 (Anaerobic process, with bench-scale demonstration)
 Option 3 (Aerobic process, with bench-scale demonstration)
 Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
 Option 5 (Aerobic processes plus raised temperature)
 Option 6 (Raise pH to 12 and retain at 11.5)
 Option 7 (75 percent solids with no unstabilized solids)
 Option 8 (90 percent solids with unstabilized solids)
 None unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge:
- h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?
 Yes No
If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:
- i. If you answered yes to f, g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.

- j. Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? ☐ Yes ☐ No
If yes, provide a copy of all labels or notices that accompany the product being sold or given away.
- k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? ☐ Yes ☐ No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.
Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported.

7. Land Application of Bulk Sewage Sludge.

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

- a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: 0 dry metric tons
- b. Do you identify all land application sites in Section C of this application? ☐ Yes ☒ No
If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).
- c. Are any land application sites located in States other than Virginia? ☐ Yes ☒ No
If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.
- d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

8. Surface Disposal.

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)

- a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: _____ dry metric tons N/A
- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
☐ Yes ☐ No
If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.
- c. Site name or number:
- d. Contact person:
Title:
Phone: ()
Contact is: ☐ Site Owner ☐ Site operator
- e. Mailing address.
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons
- g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:
Permit Number: _____ Type of Permit: _____

9. Incineration.

(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

- a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: _____ dry metric tons **CURRENTLY BIOSOLIDS ARE BEING DISPOSED OF IN SANITARY LANDFIELD**

FACILITY NAME: RICHLANDS REGIONAL WWTF

VPDES PERMIT NUMBER:

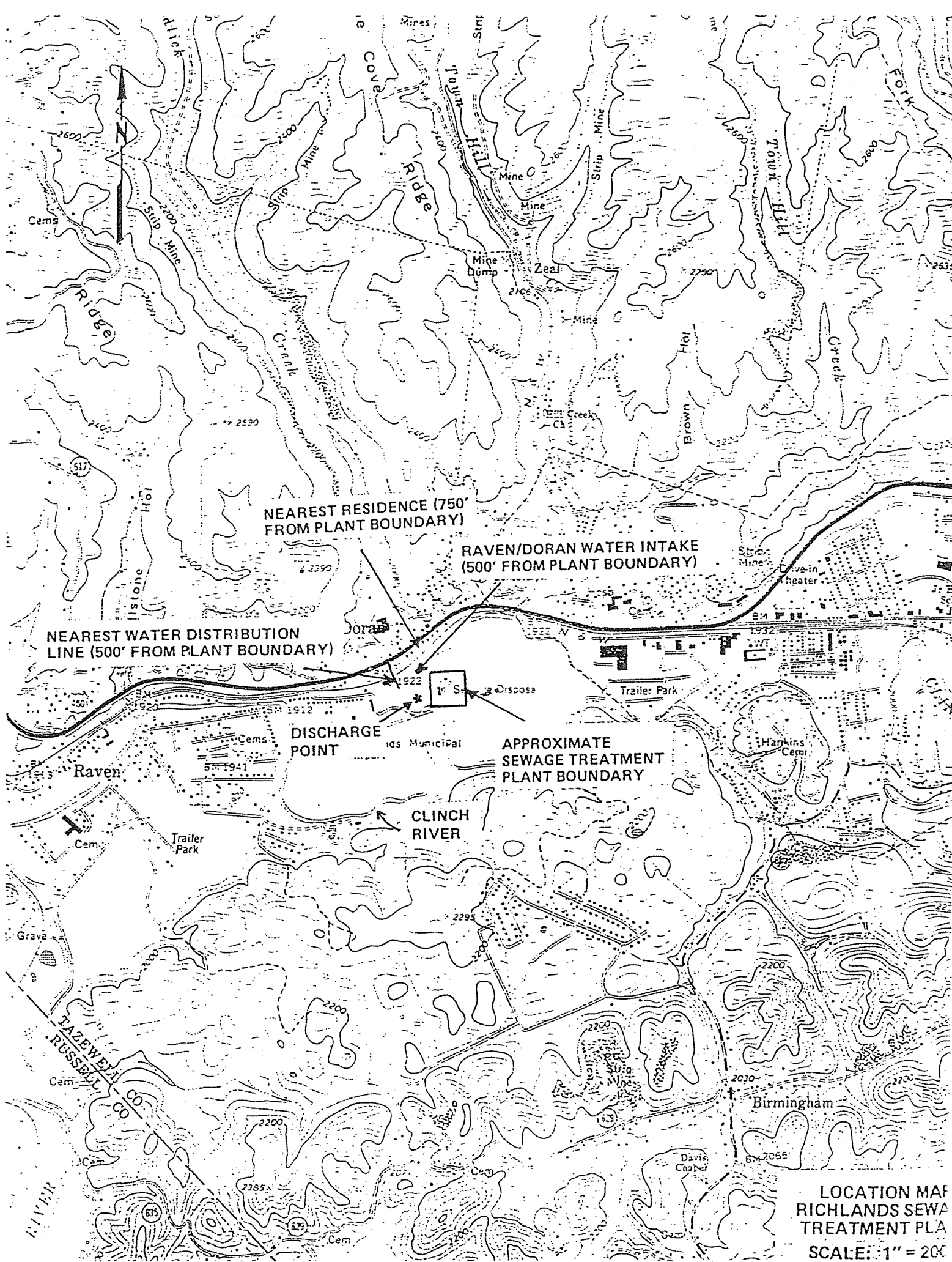
- b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
 ___ Yes ___ No
 If no, answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.
- c. Incinerator name or number:
- d. Contact person:
 Title:
 Phone: ()
 Contact is: ___ Incinerator Owner ___ Incinerator Operator
- e. Mailing address.
 Street or P.O. Box:
 City or Town: _____ State: _____ Zip: _____
- f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: _____ dry metric tons
- g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing of sewage sludge at this incinerator:
Permit Number: _____ Type of Permit: _____

10. Disposal in a Municipal Solid Waste Landfill.

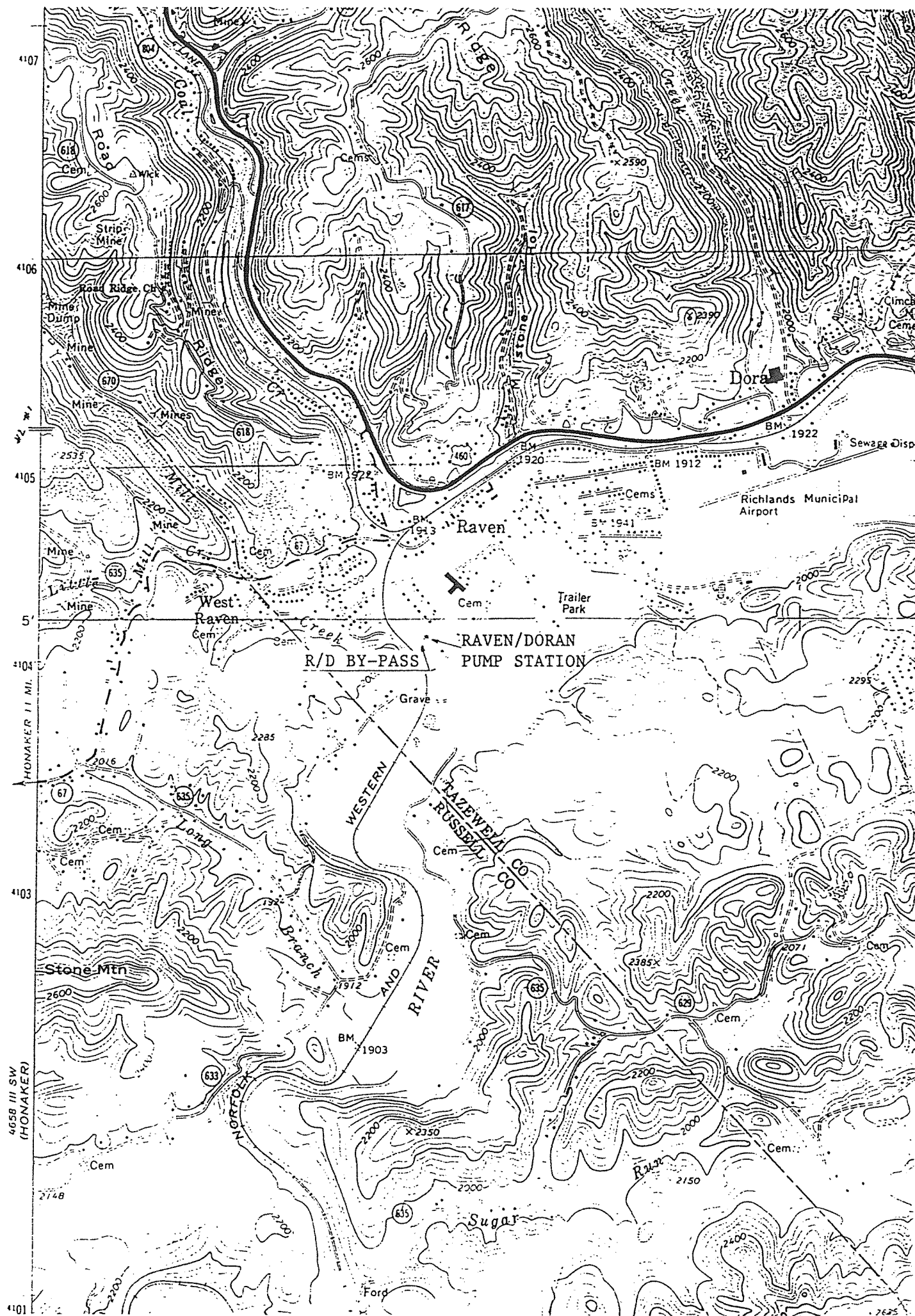
(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)

- a. Landfill name: TAZEWELL COUNTY LANDFILL
- b. Contact person: QUINTO FALGIAN
 Title: SOLID WASTE COORDINATOR
 Phone: () 276-988-4003
 Contact is: ___ Landfill Owner X Landfill Operator
- c. Mailing address. 315 SCHOOL STREET
 Street or P.O. Box:
 City or Town: TAZEWELL State: VA Zip: 24651
- d. Landfill location LYNN HOLLOW ROUTE 649
 Street or Route #:
 County: TAZEWELL
 City or Town: TAZEWELL State: VA Zip: 24651
- e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:
 _____ 254 dry metric tons
- f. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:
Permit Number: _____ Type of Permit: _____
564 _____ SANITARY LANDFILL
- g. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?
 ___ Yes ___ No
- h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.? X Yes ___ No
- i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill be watertight and covered? X Yes ___ No
 Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported. RT 19/460 FROM THE REGIONAL FACILITY TO CLAYPOOL HILL, NORTH THE LANDFILL 28.6 MILES

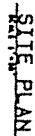
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LOCATION MAP
RICHLANDS SEWA
TREATMENT PLA
SCALE: 1" = 200'



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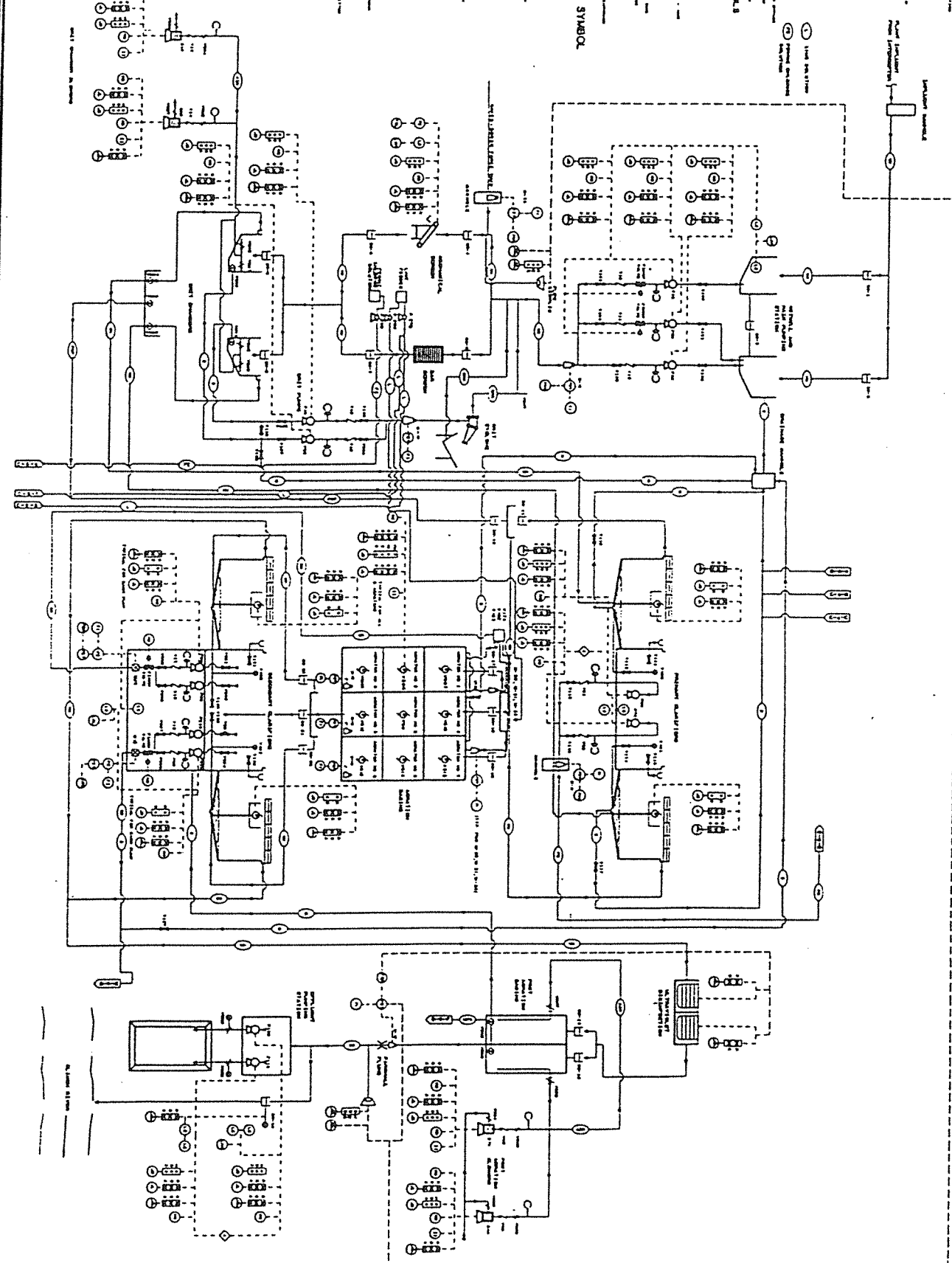


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INSTRUMENT SYSTEM

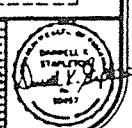
1. ☐ **1. General Information**
2. ☐ **2. Project Description**
3. ☐ **3. Objectives and Goals**
4. ☐ **4. Methodology**
5. ☐ **5. Results and Findings**
6. ☐ **6. Discussion and Conclusion**
7. ☐ **7. References**
8. ☐ **8. Appendix**
9. ☐ **9. Glossary**
10. ☐ **10. Acknowledgments**
11. ☐ **11. Bibliography**
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13. ☐ **13. Table of Contents**
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16. ☐ **16. Literature Review**
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18. ☐ **18. Data Analysis**
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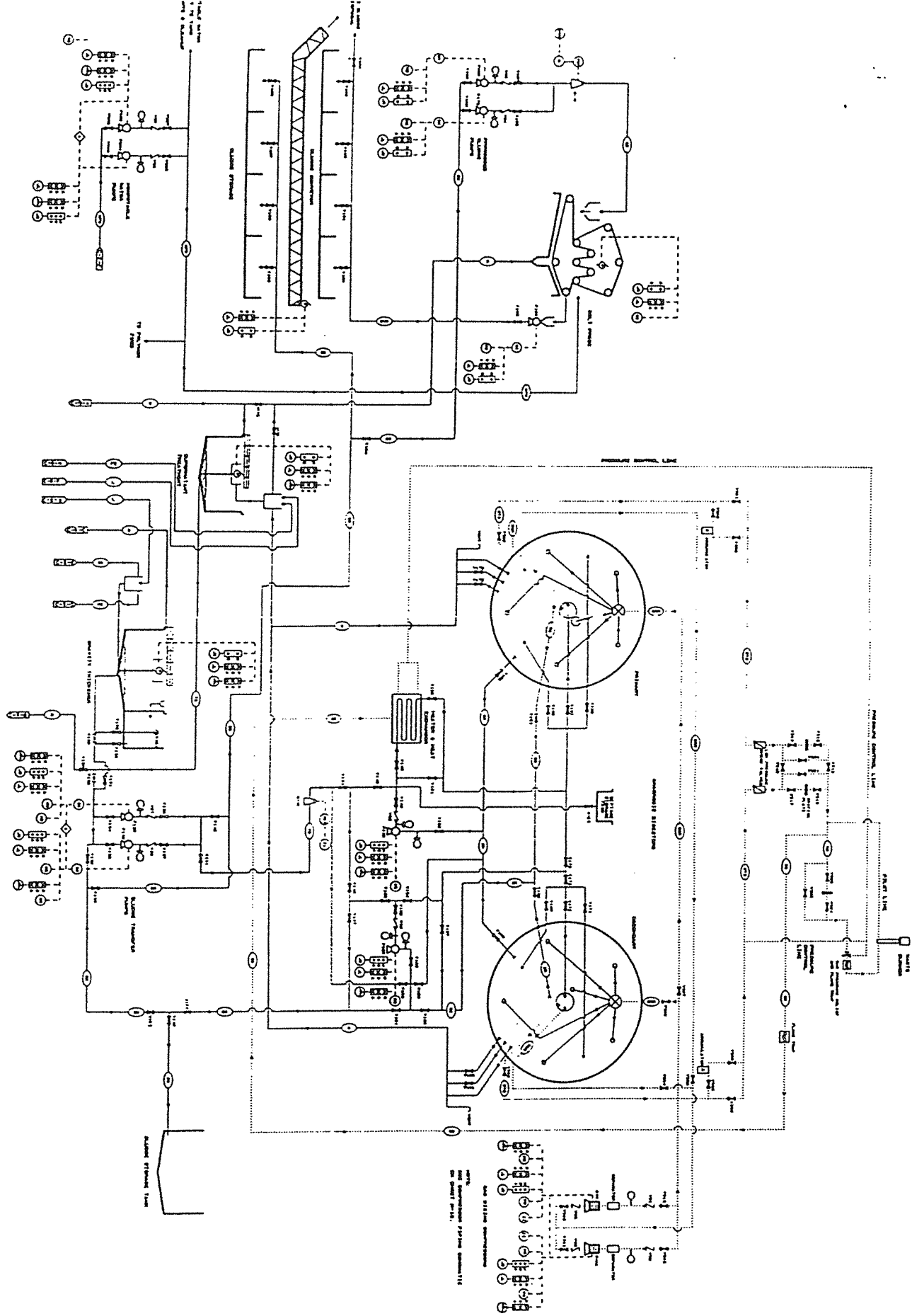


5.



THOMPSON & LITTON, INC.
ENGINEERS ARCHITECTS PLANNERS WISCONSIN





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NO.	REVISION	DATE	BY	CHKD.
1	AS SHOWN	10/1/77	JTL	WEL

WATER POLLUTION CONTROL FACILITY
TOWN OF RICHMOND, VIRGINIA
PIPING AND INSTRUMENTATION DIAGRAM

THOMPSON & LITTON, INC.
ENGINEERS, ARCHITECTS, PLANNERS & WELT. CO.



The Raven/Doran Pump Station (see location map) contains two submersible 88 hp pumps which deliver wastewater from the Raven/Doran service area to the Richlands Regional Wastewater Treatment Facility via force main. A metered by-pass has been provided for high water emergency by-pass. An alarm system has been provided to alert personnel at the Regional Facility of pump failure, etc. prior to a by-pass condition occurring. High and low switches are provided for automatic pump operation.

Jan 25, 2012

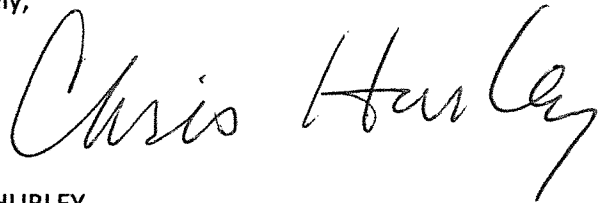
Dear David Fields

Please let this letter serves as official notice on the amount of sewer sludge that may be accepted at the Tazewell County Landfill, Permit number 564. Per the Va Solid Waste Regs VR672-20-10-5C Sludge, a facility may only accept one ton of sludge per 5 tons of solid waste per day. Currently the Tazewell County Landfill accepts an average of 150 tons per day which would allow us accept 30 tons of sludge or 2 loads.

In addition to accepting sludge from the town of Richland's, our facility accepts sludge from the town of Tazewell and PSA, Consol Energy. If any problems with the total daily sludge arise the agreement may have to be changed. This will insure that we are in compliance with the regulation as well that the site conditions are dry enough to accept the sludge.

If you have further questions concerning disposal, please contact me or Quinto at 276-988-4310.

Sincerely,

A handwritten signature in black ink that reads "Chris Hurley". The signature is written in a cursive, flowing style.

CHRIS HURLEY

Landfill Foreman